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EXAMINER	
CAMPOS, JR, JUAN J	

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3654	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/595,342	HOUEN, TERJE H.	
	Examiner	Art Unit	
	Juan J. Campos	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 December 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/03/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. **Claims 9-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement**. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

2. The specification, drawings and claims do not disclose how the cylindrical segments 30 can be connected to form a cylinder when the diameter of the cylinder is increased or decreased. If the cylindrical segments form a cylinder in a first diameter (for example, in figure 1), how would the cylindrical segments form a cylinder in a second diameter? The curvature of the cylindrical segments would prevent the segments from creating a cylinder (considered a circular shape of constant radius). The cylindrical segments would form a circular shape that is not of constant diameter.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yarnell et al. (US Patent 5,967,454) in view of Salloum (US Patent 5,004,179) and in further view of Zuk et al. (US Patent 5,791,590).

5. **Regarding claim 9,** Yarnell et al. (from here on just referred to as Yarnell) discloses a twin sheet reel core comprising of a plurality of cylindrical segments 20 (see figures 1-4 and 7, and column 3 lines 11-46) that are separably connected together in series to form a cylinder. Yarnell does not disclose a pair of opposing flanges that are separably. Salloum discloses a molded sectional reel comprising a pair of opposing end flanges 12 (see figure 1) that are separably connected to opposite ends of the cylinder 15 (see figures 2 and 4) where each flange comprises a flange sector (see both parts 55 in figure 8) and a flange segment (see right half of flange in figure 5). At the time of the invention, it would have been obvious to a person of ordinary skill in this art to substitute the flanges 12a and 12b (of Yarnell) with the flanges 12 (of Salloum) so that the cylindrical segments connect to respective flanges with flange sectors and flange segments. The motivation would be to further improve the storage of the Yarnell reel core (see column 1 lines 4-10).

6. **Further regarding claim 9,** Yarnell does not disclose the cylindrical segments being formed to different diameters. Further, Yarnell does disclose that the invention has a large degree of modification and design latitude (one being to increase the diameter of the core, or cylinder 10, see column 4 lines 43-63). Zuk (from here on just referred to as Zuk) discloses a universal reel comprising of grooves (26 and 28, or notches as considered by the examiner) on flanges (12 and 14) that determine the hub

(or cylinder) diameter. At the time of the invention, it would have been obvious to a person of ordinary skill in this art to design the cylindrical segments (of Yarnell) so that increasing the number of segments increases the diameter of the cylinder. The motivation for the design would be to design the cylindrical segments 20 (of Yarnell) so that they are capable of composing different diameters, such as the diameters of grooves (or notches) 26 and 28.

7. **Regarding claims 10-12,** Salloum further shows each opposing inner face of the flanges 12 are configured to mate with and separably connect to an end of the cylinder (see figures 2 and 4). Further, since the flange sector (see both parts of 55 in figure 8) and a flange segment (see right half of flange in figure 5) would connect to cylinder 15, Salloum shows the flange sector and flange segment capable of connecting to a cylinder. Salloum further shows the flange sector and flange segment (see definitions in regarding claim 9 above) are connected together in a splice connection (see figures 8, 5 and 6).

8. Claims 13-16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yarnell et al. (US Patent 5,967,454) in view of Salloum (US Patent 5,004,179) and in further view of Zuk et al. (US Patent 5,791,590) and in further view of Faulkner (US Patent 5,474,254).

9. Regarding claims 13 and 19, Zuk further shows a first plurality of notches 26 and a second plurality of notches 28 about an axis, the second plurality of notches having a greater radius. None of Yarnell, Salloum and Zuk discloses the cylinder further comprising of fastening hooks. Faulkner discloses a spool and method of making same

comprising a cylinder 20 with fastening hooks 26 used to connect to notches 37 (see figure 1 and column 2 line 29-32). At the time of the invention, it would have been obvious to a person of ordinary skill in this art to modify the flanges 12 (of Salloum) with two pluralities of notches (26 and 28) and modify the cylindrical segments 20 (of Yarnell) with fastening hooks (26) so that the cylinder can be connected to the flanges using hooks and notches. The motivation would for the modification would be provide the flanges (of Salloum) the capability to connect cylindrical segments at diameters (as taught by Yarnell and Zuk) and connect the cylindrical segments to the flanges using a mechanical equivalent connection to the bolts 50 (of Salloum).

10. **Regarding claim 14**, Salloum further shows each flange sector flange sector (see both parts of 55 in figure 8) comprises a series of interconnected triangular flange portions (see figure 8); the portions would be connected by parts 56 and 57. Salloum does not disclose the position of the first plurality of notches on the triangular flange portions. At the time of the invention, it would have been obvious to a person of ordinary skill in this art to position the first plurality of notches on the triangular flange portions. The motivation would be to provide notches for a first diameter of the cylinder.

11. **Regarding claim 15**, Salloum further shows each flange sector flange sector (see both parts of 55 in figure 8) comprises a central portion that defines an aperture (see rectangular corners of both 55 in figure 8).

12. **Regarding claim 16**, Salloum further shows a flange segment (see right half of flange in figure 5) defining a rolling surface (the circumferential surface of the right half of flange in figure 5). Salloum does not disclose the position of the second plurality of

notches on the flange segment. At the time of the invention, it would have been obvious to a person of ordinary skill in this art to position the second plurality of notches on the flange segment. The motivation would be to provide notches for a second diameter of the cylinder.

13. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yarnell et al. (US Patent 5,967,454) in view of Salloum (US Patent 5,004,179) and in further view of Zuk et al. (US Patent 5,791,590) and in further view of Dobson (US Patent 819,866).

14. **Regarding claim 17**, None of Yarnell, Salloum and Zuk disclose the cylindrical segments are interconnected by dovetail connections. Dobson shows a sheet-metal cylinder segment (see figure 5, considered a cylinder segment by the examiner) that uses a series of teeth (a) and notches (b) to connect the sheet-metal cylindrical segment together, see figure 5. The teeth and notches shown by Dobson are considered dovetail connections by the examiner. At the time of the invention, it would have been obvious to a person of ordinary skill in this art to substitute the dovetail connection (of Dobson) for the finger 30 and socket enclosure (see figure 6 of Yarnell) connection. The motivation would be to use a mechanical equivalent connection to the finger/socket enclosure connection (see figure 6 of Yarnell).

15. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yarnell et al. (US Patent 5,967,454) in view of Salloum (US Patent 5,004,179) and in further view of Zuk et al. (US Patent 5,791,590) and in further view of Campbell (US Patent 3,940,085).

16. **Regarding claim 18**, None of Yarnell, Salloum and Zuk disclose the cylindrical segments are interconnected by screw-bolt-joints. Campbell shows a collapsible reel that comprises of cylindrical segments 12 connected together by a pair of bolts 32 and holes 34 (considered screw-bolt-joints, see figure 2). At the time of the invention, it would have been obvious to a person of ordinary skill in this art to substitute the screw-bolt-joints (of Campbell) for the finger 30 and socket enclosure (see figure 6 of Yarnell) connection. The motivation would be to use a mechanical equivalent connection to the finger/socket enclosure connection (see figure 6 of Yarnell).

17. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yarnell et al. (US Patent 5,967,454) in view of Salloum (US Patent 5,004,179) and in further view of Zuk et al. (US Patent 5,791,590).

18. Regarding claim 20, Yarnell et al. (from here on just referred to as Yarnell) discloses a twin sheet reel core comprising of a plurality of cylindrical segments 20 (see figures 1-4 and 7, and column 3 lines 11-46) that are separably connected together in series to form a cylindrical center portion. Yarnell does not disclose a pair of opposing flanges that are separably. Salloum discloses a molded sectional reel comprising a pair of opposing end flanges 12 (see figure 1) that are separably connected to opposite ends of the cylinder 15 (see figures 2 and 4) where each flange comprises a flange sector (see both parts 55 in figure 8) and a flange segment (see right half of flange in figure 5). At the time of the invention, it would have been obvious to a person of ordinary skill in this art to substitute the flanges 12a and 12b (of Yarnell) with the flanges 12 (of Salloum) so that the cylindrical segments connect to respective flanges with flange

sectors and flange segments. The motivation would be to further improve the storage of the Yarnell reel core (see column 1 lines 4-10).

19. **Further regarding claim 20,** Yarnell does not disclose the cylindrical segments being formed to different diameters. Further, Yarnell does disclose that the invention has a large degree of modification and design latitude (one being to increase the diameter of the core, or cylinder 10, see column 4 lines 43-63). Zuk (from here on just referred to as Zuk) discloses a universal reel comprising of grooves (26 and 28, or notches as considered by the examiner) on flanges (12 and 14) that determine the hub (or cylinder) diameter. At the time of the invention, it would have been obvious to a person of ordinary skill in this art to design the cylindrical segments (of Yarnell) so that increasing the number of segments increases the diameter of the cylindrical center portion. The motivation for the design would be to design the cylindrical segments 20 (of Yarnell) so that they are capable of composing different diameters, such as the diameters of grooves (or notches) 26 and 28.

20. **Regarding claims 21-23**, Salloum further shows each opposing inner face of the flanges 12 are configured to mate with and separably connect to an end of the cylindrical center portion (see figures 2 and 4). Further, since the flange sector (see both parts of 55 in figure 8) and a flange segment (see right half of flange in figure 5) would connect to cylindrical center portion 15, Salloum shows the flange sector and flange segment capable of connecting to a cylindrical center portion. Salloum further shows the flange sector and flange segment (see definitions in regarding claim 9 above) are connected together in a splice connection (see figures 8, 5 and 6).

21. Claims 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yarnell et al. (US Patent 5,967,454) in view of Salloum (US Patent 5,004,179) and in further view of Zuk et al. (US Patent 5,791,590) and in further view of Faulkner (US Patent 5,474,254).

22. Regarding claims 24-25, Zuk further shows a first plurality of notches 26 and a second plurality of notches 28 about an axis, the second plurality of notches having a greater radius. None of Yarnell, Salloum and Zuk discloses the cylindrical center portion further comprising of fastening hooks. Faulkner discloses a spool and method of making same comprising a cylinder 20 with fastening hooks 26 used to connect to notches 37 (see figure 1 and column 2 line 29-32). At the time of the invention, it would have been obvious to a person of ordinary skill in this art to modify the flanges 12 (of Salloum) with two pluralities of notches (26 and 28) and modify the cylindrical segments 20 (of Yarnell) with fastening hooks (26) so that the cylindrical center portion can be connected to the flanges using hooks and notches. The motivation would for the modification would be provide the flanges (of Salloum) the capability to connect cylindrical segments at diameters (as taught by Yarnell and Zuk) and connect the cylindrical segments to the flanges using a mechanical equivalent connection to the bolts 50 (of Salloum).

23. Regarding claim 26, Salloum further shows each flange sector flange sector (see both parts of 55 in figure 8) comprises a series of interconnected triangular flange portions (see figure 8); the portions would be connected by parts 56 and 57. Salloum does not disclose the position of the first plurality of notches on the triangular flange

portions. At the time of the invention, it would have been obvious to a person of ordinary skill in this art to position the first plurality of notches on the triangular flange portions. The motivation would be to provide notches for a first diameter of the cylinder.

24. Regarding claim 27, Salloum further shows each flange sector flange sector (see both parts of 55 in figure 8) comprises a central portion that defines an aperture (see rectangular corners of both 55 in figure 8).

25. Regarding claim 28, Salloum further shows a flange segment (see right half of flange in figure 5) defining a rolling surface (the circumferential surface of the right half of flange in figure 5). Salloum does not disclose the position of the second plurality of notches on the flange segment. At the time of the invention, it would have been obvious to a person of ordinary skill in this art to position the second plurality of notches on the flange segment. The motivation would be to provide notches for a second diameter of the cylinder.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan J. Campos whose telephone number is (571) 270-5229. The examiner can normally be reached on 9am-4pm (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on (571) 272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJC
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